## REMARKS

### I. Introduction

With the cancellation herein without prejudice of claims 4, 5, 24, 35, 36 and 41, claims 1 to 3,6 to 8, 23, 25, 32 to 34, 37 to 40, 42 and 43 are currently pending in the above-referenced application. In view of the foregoing amendments and the following remarks, it is respectfully submitted that the present claims are allowable, and reconsideration is respectfully requested.

### II. Rejection of Claims 1, 2, 6, 7, 23, 32, 33, 37, 38, 40 and 43 under 35 U.S.C. § 102(e)

Claims 1, 2, 6, 7, 23, 32, 33, 37, 38, 40 and 43 were rejected under 35 U.S.C. § 102(e) as anticipated by U.S. Patent No. 6,285,400 ("Hokari"). Applicants respectfully submit that Hokari does not anticipate the present claims for at least the following reasons.

Claim 1 relates to a focal surface for an opto-electronic imaging system. Claim 1 recites that the system includes at least one detector, formed of at least one solid state element and configured to record an image, a detector carrier configured to hold the at least one detector, and a flexible carrier substrate. Claim 1 recites that the at least one detector is flexible and that at least one of the focal surface and the at least one detector have a curvature for recording a curved image plane. Claim 1 further recites that the at least one solid state element is flexible, thinned, and connected to the flexible carrier substrate. Claim 1 has been amended herein without prejudice to recite that the at least one solid state element has a maximum thickness of approximately 20 μm. Support for the amendment to claim 1 may be found, for example, in claim 4 as originally filed.

Claim 23 relates to a detector for image recording. Claim 23 recites that the detector includes a thinned, flexible solid state element and a flexible carrier substrate. Claim 1 further recites that the solid state element is connected to the flexible carrier substrate and that the detector is flexible. Claim 23 has been amended herein without prejudice to recite that the solid state element has at least one of a thickness of approximately 10 μm to 20 μm and a length-to-width ratio of approximately 20 to 60. Support for the amendment to claim 23 may be found, for example, in claim 24 as originally filed.

Claim 32 relates to an opto-electronic imaging system. Claim 32 recites that the system includes a focal surface and that the focal surface includes at least one detector formed of at least one solid state element and configured to record an image. Claim 32

further recites that the at least one detector is flexible and that at least one of the focal surface and the at least one detector have a curvature for recording a curved image plane. Claim 32 further recites that the system includes a detector carrier configured to hold the at least one detector and a flexible carrier substrate, the at least one solid state element being flexible, thinned, and connected to the flexible carrier substrate. Claim 32 has been amended herein without prejudice to recite that the at least one solid state element has a maximum thickness of approximately 20 μm. Support for the amendment to claim 32 may be found, for example, in claim 35 as originally filed.

Claim 40 relates to an opto-electronic imaging system. Claim 40 recites that the system includes a detector and that the detector includes a thinned, flexible solid state element and a flexible carrier substrate. Claim 40 further recites that the solid state element is connected to the flexible carrier substrate and that the detector is flexible. Claim 40 has been amended herein without prejudice to recite that the solid state element has at least one of a thickness of approximately 10 μm to 20 μm and a length-to-width ratio of approximately 20 to 60. Support for the amendment to claim 40 may be found, for example, in claim 41 as originally filed.

Claim 43 relates to an opto-electronic imaging system. Claim 43 recites that the system includes at least one of a focal surface and a detector. Claim 43 further recites that the focal surface includes at least one detector formed of at least one solid state element and configured to record an image. Claim 43 further recites that the at least one detector is flexible and that at least one of the focal surface and the at least one detector have a curvature for recording a curved image plane. Claim 43 further recites that the system includes a detector carrier configured to hold the at least one detector and a flexible carrier substrate. Claim 43 further recites that the at least one solid state element is thinned and connected to the flexible carrier substrate. Claim 43 further recites that the detector includes a thinned, flexible solid state element and a flexible carrier substrate. Claim 43 further recites that the solid state element is connected to the flexible carrier substrate and that the detector is flexible. Claim 43 has been amended herein without prejudice to recite that the at least one solid state element has a maximum thickness of approximately 20 μm. Support for this amendment to claim 43 may be found, for example, in claim 4 as originally filed. Claim 43 has been further amended herein without prejudice to recite that the detector is bonded to the flexible carrier substrate via a first bonding layer, and the flexible carrier substrate is bonded to the detector carrier by a second bonding layer, the detector carrier having a curvature.

Support for this amendment to claim 43 may be found, for example, on page 6, line 24 to page 7, line 5 of the Specification.

Hokari purportedly relates to a solid state image pick-up device equipped with a charge coupled device having an incident surface alignable with the focal plane. Hokari state that the pick-up device includes a resilient plate member (42) supported by a carrier cylindrical side wall (41b) and spaced from the circular bottom plate (41a) of the carrier. Contrary to the assertion contained on page 5 of the Final Office Action, Hokari does not disclose, or even suggest, that at least one solid state element has a maximum thickness of approximately 20 μm, as recited in amended claims 1, 32 and 43, and does not disclose, or even suggest, that a solid state element has at least one of a thickness of approximately 10 μm to 20 μm and a length-to-width ratio of approximately 20 to 60, as recited in amended claims 23 and 40. Rather, Hokari mentions at col. 5, lines 47 to 48 that a "semiconductor chip 43 ranges ***200 microns to 300 microns*** in thickness" (emphasis added).

To anticipate a claim, each and every element as set forth in the claim must be found in a single prior art reference. Verdegaal Bros. v. Union Oil Co. of Calif., 814 F.2d 628, 631, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987). Furthermore, "[t]he identical invention must be shown in as complete detail as is contained in the . . . claim." Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989). That is, the prior art must describe the elements arranged as required by the claims. In re Bond, 910 F.2d 831, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990). As more fully set forth above, it is respectfully submitted that Hokari does not disclose, or even suggest, all of the limitations as set forth in amended claims 1, 23, 32, 40 and 43. It is therefore respectfully submitted that Hokari does not anticipate amended claims 1, 23, 32, 40 and 43.

As for claims 2, 6 and 7, which depend from claim 1 and therefore include all of the limitations of claim 1, it is respectfully submitted that Hokari does not anticipate these dependent claims for at least the same reasons given above in support of the patentability of claim 1.

As for claims 33, 37 and 38, which depend from claim 32 and therefore include all of the limitations of claim 32, it is respectfully submitted that Hokari does not anticipate these dependent claims for at least the same reasons given above in support of the patentability of claim 32.

In view of all of the foregoing, withdrawal of this rejection is respectfully requested.

## III. Rejection of Claims 23 and 40 under 35 U.S.C. § 102(b)

Claims 23 and 40 were rejected under 35 U.S.C. § 102(b) as anticipated by U.S. Patent No. 5,818,035 ("Krivanek et al."). Applicants respectfully submit that Krivanek et al. do not anticipate claims 23 and 40 for at least the following reasons.

Krivanek et al. purportedly relate to an optically coupled large-format solid state imaging apparatus having edges of an imaging device. The apparatus is stated to include an image sensing area (43a) formed on a semiconductor wafer (43b). See col. 4, lines 28 to 30. An annular frame(52) is stated to contact and support the underside of the imaging device (43) about its peripheral edges. See col. 4, lines 30 to 32. Nowhere do Krivanek et al. disclose, or even suggest, that a solid state element has at least one of a thickness of approximately 10 μm to 20 μm and a length-to-width ratio of approximately 20 to 60 as recited in claims 23 and 40. It is therefore respectfully submitted that Krivanek et al. do not anticipate claims 23 and 40.

In view of the foregoing, withdrawal of this rejection is respectfully requested.

## IV. Rejection of Claims 3 and 34 under 35 U.S.C. § 103(a)

Claims 3 and 34 were rejected under 35 U.S.C. § 103(a) as unpatentable over the combination of Hokari and U.S. Patent No. 6,285,035 ("Taravade"). Applicants respectfully submit that the combination of Hokari and Taravade does not render unpatentable the present claims for at least the following reasons.

Taravade purportedly relates to an apparatus for detecting an endpoint polishing layer of a semiconductor wafer having a wafer carrier with independent concentric sub-carriers and an associated method. Taravade is not relied upon for disclosing or suggesting the limitations of claims 1 and 32 not disclosed or suggested by Hokari. Indeed, it is respectfully submitted that Taravade does not disclose, or even suggest, the limitations of claims 1 and 32 not disclosed or suggested by Hokari. It is therefore respectfully submitted that the combination of Hokari and Taravade does not render unpatentable claims 3 and 34.

## V. Rejection of Claims 4, 5, 24, 25, 35 and 36 under 35 U.S.C. § 103(a)

Claims 4, 5, 24, 25, 35 and 36 were rejected under 35 U.S.C. § 103(a) as unpatentable over the combination of Hokari and U.S. Patent No. 6,486,917. As an initial matter, Applicants note that the Final Office Action on page 4 indicates that the claims are rejected based on the combination of Hokari and Taravade, but on page 5, the Final Office

Action discusses the combination of Hokari and U.S. Patent No. 6,486,917. Given the statements contained on page 5 of the Final Office Action, it appears that the rejection of claims 4, 5, 24, 25, 35 and 36 is based on the combination of Hokari and U.S. Patent No. 6,486,917. Clarification as to the grounds of this rejection is respectfully requested.

As another initial matter, claims 4, 5, 24, 35 and 36 have been canceled herein without prejudice, thereby rendering moot the present rejection with respect to claims 4, 5, 24, 35 and 36.

The present application was filed on February 2, 2001 and claims priority to Application No. 100 04 891.8, filed in the Federal Republic of Germany on ***February 4, 2000***. A claim of priority to German Application No. 100 04 891.8 was made, *inter alia*, in the "Combined Declaration and Power of Attorney for Patent Application," filed on April 16, 2001, and a certified copy of German Application No. 100 04 891.8 was submitted to the United States Patent and Trademark Office on February 2, 2001. A certified translation of German Application No. 100 04 891.8 is enclosed herewith.

U.S. Patent No. 6,486,917 issued on ***November 26, 2002*** from U.S. Application Serial No. 09/767,977, filed on ***January 23, 2001***. Since the filing date of ***January 23, 2001*** of U.S. Patent No. 6,486,917 is ***after*** the filing date of ***February 4, 2000*** of German Application No. 100 04 891.8, to which the present application claims priority, it is respectfully submitted that U.S. Patent No. 6,486,917 does not constitute prior art against any claim of the present application, and withdrawal of this rejection is therefore respectfully requested.

Applicants further respectfully traverse the Examiner's assertion that Hokari discloses that the at least one solid-state element has a maximum thickness of approximately 20 or 10 μm. As more fully set forth above, the semiconductor chip 41 of Hokari is stated to have a thickness of ***200 to 300 microns***. See col. 5, lines 47 to 48.

## VI. Claims 25 and 42

Applicants note that the Final Office Action does not state any grounds of rejection of claims 25 and 42. Claim 25 as amended herein without prejudice depends from claim 23, and claim 42 as amended herein without prejudice depends from claim 40. It is respectfully submitted that claim 25 is allowable for at least the same reasons given above in support of the patentability of claim 23, and it is respectfully submitted that claim 42 is allowable for at least the same reasons given above in support of the patentability of claim 40.

## VI. Allowable Subject Matter

Applicants note with appreciation the indication of allowable subject matter contained in claims 8 and 39. In this regard, the Examiner will note that each of claims 8 and 39 has been rewritten herein in independent form to include all of the limitations of its respective base claim and any intervening claims. It is therefore respectfully submitted that claims 8 and 39 are in condition for immediate allowance.

## VII. Conclusion

It is therefore respectfully submitted that all of the presently pending claims are allowable. All issues raised by the Examiner having been addressed, an early and favorable action on the merits is earnestly solicited.

Respectfully submitted,

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